# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/842,672 | 04/27/2001 | Jerker Bergenek | 003300-777 | 9036 |

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|---|---|

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| EXAMINER |
|---|
| CHAWAN, SHEELA C |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2625 | |

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 09/842,672 | BERGENEK ET AL. |
| | Examiner | Art Unit |
| | Sheela C Chawan | 2625 |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>27 April 2001</u>.

2a)☐ This action is **FINAL**.      2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

# DETAILED ACTION

## *Preliminary Amendment*

1.      Preliminary amendment filed on 4/27/01 have been entered.

## *Priority*

2.      Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which

papers have been placed of record in the file.

## *Drawings*

3.      The drawings are objected to because of draftperson's remarks (see attached

PTO-948 paper number 7. A proposed drawing correction or corrected drawings are

required in reply to the Office action to avoid abandonment of the application. The

objection to the drawings will not be held in abeyance.

## *Claim Rejections - 35 U.S.C. § 102*

4.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section

122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the

invention by the applicant for patent, except that an international application filed under the

treaty defined in section 351(a) shall have the effects for purposes of this subsection of an

application filed in the United States only if the international application designated the United

States and was published under Article 21(2) of such treaty in the English language.

Claims 1 –14, 16 - 20 are rejected under 35 U.S.C. 102(e) as being anticipated

by Russo et al. (US. 6535622 B1).

As to claims 1 and 12, Russo discloses a method of preventing false acceptance

in a system for checking fingerprints which comprises a sensor( fig 1, item 14, column

4, lines 7- 67) characterised by the step of detecting a latent fingerprint ( fig 2, 3 and 5)

on the sensor (fig 6, column 6, line 16 to column 7, lines 1-38).

As to claims 2 and 13, Russo discloses a method wherein the step of detecting a

latent fingerprint comprises the steps of recording (fig 6, item 14 is a sensor which

records the latent fingerprint) a fingerprint by means of the sensor and ( fig 1, 14), on

the basis of the location ( recording a portion of the image or the entire image is stored

in the memory 22 based on centrally located portion of the image , column 6, lines 40-

53) of the recorded fingerprint on the sensor (column 6, lines 40-53), evaluating whether

the recorded fingerprint originates from a latent fingerprint on the sensor or from a finger

placed on the sensor (fig 6, column 6, line 16 to column 7, lines 1-38).

As to claims 3 and 14, Russo discloses a method wherein the evaluation step

comprises comparing the location of the recorded fingerprint on the sensor with the

location of a previously recorded fingerprint on the sensor (fig 6, column 6, line 16 to

column 7, lines 1-38).

As to claims 4 and 17, Russo discloses a method further comprising the step of,

if the location of the recorded fingerprint on the sensor and the location of the previously

recorded fingerprint essentially correspond ( column 6, lines 45- 67, column 7, lines 1-

38), considering the recorded fingerprint as originating from a latent fingerprint (fig 6,
column 6, line 16 to column 7, lines 1-38).

As to claims 5 and 18, Russo discloses a method wherein the previously
recorded fingerprint is the immediately preceding fingerprint which was considered as
originating from a finger placed on the sensor ( column 7, lines 13-38).

As to claims 6 and 19, Russo discloses a method wherein the previously
recorded fingerprint is the immediately preceding fingerprint which was accepted (
column 2, lines 30- 53, column 3, lines 52- 67 ).

As to claims 7 and 20, Russo discloses a method further comprising the step of
storing  information about the location of the recorded fingerprint on the sensor if the
recorded fingerprint is not considered as originating from a latent fingerprint ( column 6,
lines 3- 67, column 7, lines 1- 12) .

As to claim 8, Russo discloses a method wherein the step of comparing

the location of the recorded fingerprint on the sensor with the location of a
previously recorded fingerprint comprises comparing the location on the sensor of at
least one feature of the recorded fingerprint with the location on the sensor of the
corresponding feature of the previously recorded fingerprint ( fig 6, column 6, line 16 to
column 7, lines 1-38).

As to claim 9, Russo discloses a method wherein the step of comparing the
location of the recorded fingerprint on the sensor with the location of a previously
recorded fingerprint comprises comparing the location on the sensor of a partial area (
partial area is considered to be a portion of image, see column 6, lines 45- 67) of the

recorded fingerprint with the location of a corresponding partial area of the previously

recorded fingerprint (column 6, lines 45- 67).

As to claim 10, Russo discloses a method further comprising the step of

matching at least one partial area of a reference fingerprint with the recorded fingerprint

to obtain at least one matching partial area of the recorded fingerprint ( partial area is

considered to be a portion of image, see column 6, lines 45- 67), wherein the step of

comparing the location of the recorded fingerprint on the sensor with the location of a

previously recorded fingerprint comprises comparing the location on the sensor of the

matching partial area with the location of the corresponding partial area of the

previously recorded fingerprint ( fig 6, item 68 and 70, column 7, lines 13- 38).

As to claim 11, Russo discloses a method wherein the comparison of the location

of the recorded fingerprint on the sensor with the location of a previously recorded

fingerprint is carried out only in the event that a matching between a reference

fingerprint and the recorded fingerprint reveals that the recorded fingerprint originates

from an authorised person (column 3, lines 52-67).

As to claim 16, Russo discloses a storage medium for digital information ( fig 1,

item 22 , memory where information is stored ), which medium is readable for a

computer system ( fig 1, item 12, a computer systems ) the storage medium containing

a computer program for preventing false acceptance of fingerprints, characterised in

that said program implements ( column 1, lines 10-13, column 3, lines 10- 67).

*Claim Rejections - 35 USC § 103*

5.    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
>
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
>
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
>
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
>
> manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and

potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over  Russo

et al. (US. 6535622 B1), as applied to claims 1 -14, 16 – 20 above and further in view of

Tomko et al.(US.5,712,912).

Regarding claim 15, Russo discloses a method to personal verification systems,

which utilize sensors to obtain biometric information from a user. Russo is silent about

specifics details of sensor has an integral coordinate system.

Tomko discloses a method for securely storing a personal identification number (pin) or cryptographic key. The system comprises of:

a system wherein the sensor has an integral coordinate system (column 9, lines 2- 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Russo to include a sensor having an integral coordinate system. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Russo by the teaching of Tomko in order to define the coordinates of the peaks with their relative position is to make the algorithm invariant to a possible rotation of a finger and also to form the unique vector (as suggested by Tomko at column 9, lines 17- 20).

*Other prior art cited*

6.      The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Russo (US.6,546,122 B1) discloses method for combining fingerprint templates representing various sensed areas of a fingerprint to derive one fingerprint template representing the fingerprint.

Fishbine et al.(US. 5,230,025) discloses  method and apparatus for capturing skin print images.

Reardon (US.5,078,426) discloses fingerprint recording device .

Asano et al.(US.4,794,260) discloses method for detecting fingerprint using a laser and an apparatus therefor.

Hayes et al.(US.5,313,265) discloses non-contact non-destructive latent image scanner.

Blonder (US.4,414,684) discloses method and apparatus for performing a comparison of given patterns, in particular fingerprints.

*Contact Information*

7.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sheela C Chawan whose telephone number is 703-

305- 4876.  The examiner can normally be reached on Monday - Thursday 6 - 7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bhavesh Mehta can be reached on 703-308-5246.  The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

S cc

Sheela Chawan
Patent Examiner
Group Art Unit 2625
March 29, 2004
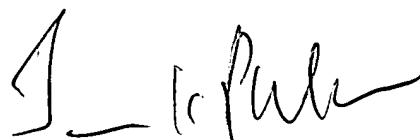
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